

REMARKS

The Examiner is thanked for the thorough examination of this application.

Examiner Interview

The undersigned would like to thank Examiner Wong for taking the time to discuss this matter in a telephonic interview, on May 11, 2005. During that interview, the undersigned and Examiner Wong focused the discussion on the newly cited reference (published application US 2002/0075159A1 – hereafter DeLine). Specifically, the undersigned point out that DeLine did not teach the controllable direction of a camera (in response to the movement of a display) to present on the display, an image similar to that which would be observed in a rear-view mirror in a similar position. Instead, DeLine teaches a video device that is coupled to a rear-view mirror (not a display), such that the video device is pointed toward the driver when the rear-view mirror is positioned in its normal position. The purpose is to allow video conferencing between the driver and someone at a remote location. Importantly, the image captured by the video device is not displayed on the rear-view mirror (or a display that is in the general form of a rear-view display), but rather the captured image is communicated to a remote location for display.

The undersigned and Examiner Wong generally discussed adding additional language to the independent claims, which would clearly define these claims over the cited art of record. In this regard, we discussed features illustrated in FIG. 4, which clearly defined over DeLine. Specifically, we discussed language regarding the movement of the camera (in horizontal and vertical directions) in response to the movement of the display in corresponding directions. No specific language was proposed, and so no agreement was reached.

Claim Amendments Raise No New Issues

The undersigned respectfully submits that the claim amendments raise no new issues, and should be entered. In this regard, claim 1 has been amended merely to clarify that the servo system is configured to move the camera in both horizontal and vertical directions. This is clearly disclosed in both FIGs 2 and 3, as well as the block diagram of FIG. 4 (showing X and Y servo motors). The undersigned submits that this language was essentially implied in the previous language, which provided that the camera is moved, wherein the direction of the camera is such that the display displays effectively what would be displayed on a conventional rear-view mirror in a similar position (which is moveable in both X and Y directions). Claim 15 is amended to confirm that the coupling between the display and the camera (in this embodiment) is a motorized one (which was already considered in the context of claim 1). Therefore, the added features were clearly under consideration, based on the previous language of the claims, in view of the clear teachings of the specification.

Discussion of Substantive Rejections

Turning now to the substantive rejections, the Office Action rejected all independent claims as obvious over the combination of U.S. Patent 6,304,173 (hereafter the ‘173 patent) in view of DeLine. As discussed with Examiner Wong in the telephone interview, and summarized above, a feature of an embodiment of the present application is the cooperative relationship between the position sensor(s) and the servo motor(s) that control the direction of the camera, *such that the image presented on the display effectively mimics that of a conventional rear-view mirror*. Regarding this feature, the specification describes the following:

In the preferred embodiment, the servo system controls the angle or the direction of the camera 150 such that the direction of the camera 150 is substantially co-aligned with the direction 132 of the display 130.

Advantageously, *this provides the driver of the vehicle with a “look and feel” of the display that is consistent with the “look and feel” of a conventional rear-view mirror.* In this regard, when a driver, using a conventional rear-view mirror, wants to view an area to the left of the area presently displayed in the rear-view mirror, the driver simply adjusts or angles the rear-view mirror to the left. Using a system of the present invention, a driver can achieve the same result by adjusting or angling the display 130 to the left. To facilitate this maneuverability of the display 130, the display may be mounted to the vehicle like a conventional rear-view mirror.

(*Emphasis added*, specification, p. 9, lines 3-12).

Accordingly, the independent claims of the present application have been amended to recite defining features. For example, claim 1 recites: “a servo system coupled to the camera, *the servo system being configured to controllably direct control the direction of the camera in both horizontal and vertical directions based upon information obtained from the at least one position sensor wherein the direction of the camera is controllably moved in both horizontal and vertical directions so that the visual image on the display is similar to that which would be seen in a conventional rear view mirror that is moved in the same position.*” Likewise, independent claim 15 recites: “a display in the general form of a rear-view mirror, the display being disposed near a top center portion of a windshield of the vehicle, the display being configured to display an image acquired by the camera, *wherein the direction of the camera is controlled by a motorized system such that the camera is controllably moved in both horizontal and vertical directions in response to movement horizontal and vertical movements of the display so that the visual image on the display is similar to that which would be seen in a conventional rear view mirror that is moved in the same position.*”

The Office Action admitted that the ‘173 patent has no such teaching or disclosure. The DeLine reference was sited as providing this teaching. However, as discussed with the Examiner and summarized above, the DeLine reference fails to disclose this claimed feature. In this regard, DeLine fails to disclose the motorized movement (e.g., servo system) of the video device in response to corresponding movement of the display (the rear-view mirror in DeLine). For at least this reason, the rejections should be withdrawn.

In addition, even combined, the ‘173 patent and DeLine fail to teach a camera that is directionally controlled to provide, on a display, a captured image that closely mimics a view that would be observed from a conventional rear-view mirror that is positioned in the directional position of the display. Indeed, the combination of the ‘173 patent and DeLine more fundamentally fails to disclose a system whereby a capturing camera device is directionally controlled in response to a positioned direction of a coupled display (which displays the image captured by the camera).

Accordingly, as amended independent claims 1 and 15 clearly define over the cited art and these claims should now be allowed.

As a separate and independent basis for the allowability of claims 1 and 15, the undersigned respectfully traverses the combination of DeLine with the ‘173 patent. As noted near the top of page 4 of the Office Action, the Office Action alleged that the combination was obvious “as a whole” “for providing the driver with a clear line of sight for viewing objects...” As noted above, the teaching of DeLine cannot be applied to the teachings of the ‘173 patent, since the image captured on the camera of DeLine is not displayed to the driver (nor is it an image of the rear area of the vehicle, but rather an image of the driver himself). For at least this reason, the combination of DeLine with the teachings of the ‘173 patent is misplaced.

With further regard to the combination, the Office Action alleged that the combination was proper “as a whole.” The undersigned respectfully traverses this allegation in support of the combination, as being against the relevant legal standards. In this regard, the Federal Circuit has clearly stated that there must be a teaching, suggestion, or other motivation to combine specific features of the combined references, and not just combine the references as a whole.

It is well settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. *W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added*) *In re Dow Chemical Company*, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. *Stiftung v. Renishaw PLC*, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create an rear-view display system, as claimed by the Applicant. "Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would

have selected these components for combination in the manner claimed." *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

"A showing of a suggestion, teaching, or motivation to combine the prior art references is an essential component of an obviousness holding." *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000)) (*quoting C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); The Federal Circuit has made it clear "that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dembicza*k, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999).

For at least the foregoing reasons, the undersigned respectfully traverses the combination of DeLine with the '173 patent.

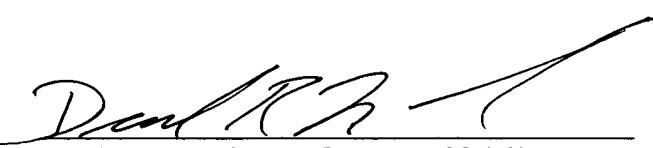
Dependent claims

Various rejections have also been made to the dependent claims. However, these rejections have been rendered moot by the amendments made to, and the allowability of, the independent claims.

No fee is believed to be due in connection with this submission.

Respectfully Submitted,

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